

#### INTERPRETING THE VISUAL RECORD

A coal miner drags his load from a tunnel. In some areas miners can use hand tools to remove coal from deposits near the surface. Small private mines like this one generally do not follow safety or environmental guidelines. **What are some ways that government policies may have changed coal mining in China?**

## Natural Resources

China has huge amounts of energy and mineral resources. It is the world's leading producer of coal, lead, tin, and tungsten. Other mineral resources include iron ore, bauxite, gold, and a wide range of metals. Coal deposits are found throughout the country, but the most important reserves are located in the north and northeast. The widespread use of coal has caused serious air pollution. Oil and natural gas are also found in many areas. China's government is working with Western oil companies to develop both offshore and interior areas for oil and gas production.

Hydropower is a major energy resource in China. Developing this resource further would help lessen dependence on coal and, in turn, reduce pollution. China is currently building the world's largest dam, which could provide vast amounts of hydroelectricity. The dam is located on the Chang River and is known as the Three Gorges Dam.

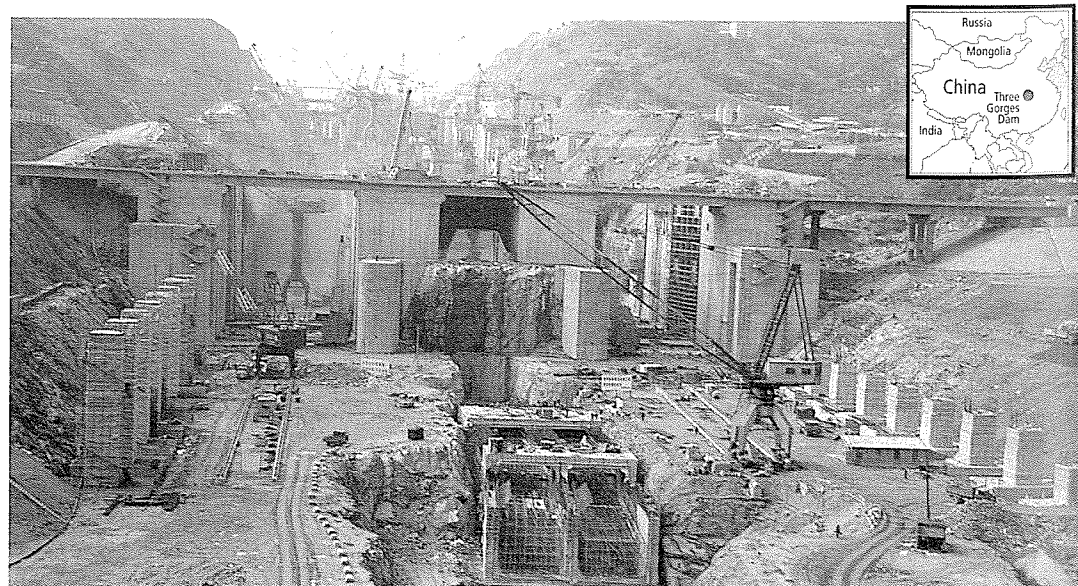


#### FOCUS ON GEOGRAPHY

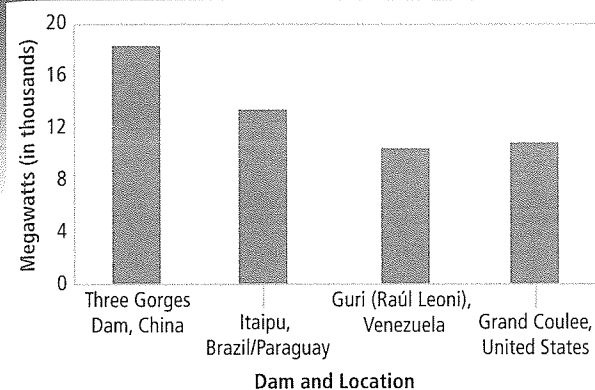
**Three Gorges Dam** Detailed planning for the Three Gorges Dam began in the 1950s. After nearly 40 years of delays, dam construction finally began in 1993. It is scheduled to be completed in 2009. When it is finished, the Three Gorges Dam will generate as much power as 15 coal-burning power plants and create a reservoir about 370 miles (595 km) long. However, that reservoir will flood hundreds of towns and cities, forcing between 1 and 2 million people to move to higher ground.

One of the main reasons for building the dam is to control dangerous flooding along the Chang River. The Chinese also want to increase river traffic and trade and generate hydropower. However, the size and scale of the project have many people worried about its environmental impact. The dam will disrupt ecosystems along the river, affecting plants and animals, such as a rare freshwater dolphin species. As much as 240,000 acres (97,200 ha) of farmland will be lost, and more than 1,200 historical sites will be flooded. Researchers are racing to save as much as they can from these sites. Critics also worry about the cost. Originally estimated at \$11 billion, the dam could cost up to \$50 billion. Many critics argue that several smaller and cheaper dams could be built instead. They

In 1997 the waters of the Chang were diverted through a canal to allow construction of the Three Gorges Dam. More than 138.5 million cubic yards (102.6 million cubic m) of earth and stone will be moved before the dam is completed. Some 18,000 people are involved in the dam's construction.



#### World's Largest-Capacity Hydropower Plants



Source: The World Almanac and Book of Facts 2001

argue that these dams would accomplish the same goals and affect the natural environment less.

**READING CHECK: Human Systems** How will the Three Gorges Dam affect settlement patterns and population distribution?

**Agricultural Resources** Because of its diverse climates and landform regions, China has a wide variety of soils. However, only about 10 percent of the country is arable. One important farming region is the fertile area along the Chang River. **Paddy fields**—wet lands where rice is grown—are common there. (See the map on the next page.) Because paddy agriculture uses so much human labor, it is a form of **intensive agriculture**. In many paddy areas, two crops are harvested each year from the same plot of land. This practice is known as **double cropping**.

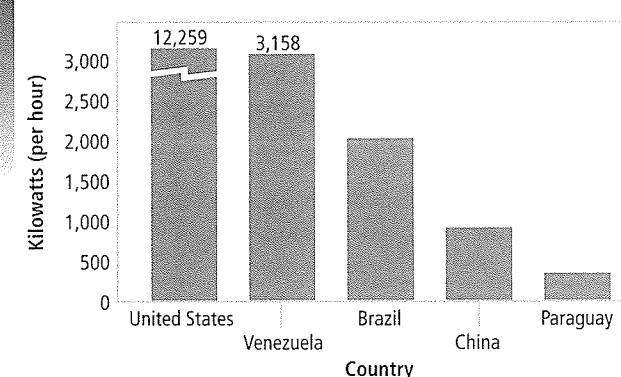
Loess deposits in northern China are very fertile. However, they are easily eroded. The Huang River and its tributaries have eroded a huge loess plateau in the area. This erosion has created a distinctive landscape of steep-sided gullies. The Huang River often overflows its banks during the summer. Heavy rain swells the river, and the thick silt settles to the bottom, raising the level of the riverbed. The yellowish loess soil also gives the river its name, which means “yellow” in Chinese.

To feed its large population, China's farmers grow many different crops. Intensive farming methods boost production to high levels. In fact, China is a world leader in a wide range of farm products, such as ducks, peanuts, and rice. In general, southern China produces crops that need warmer temperatures, such as rice, citrus fruits, tea, and sugarcane. Northern China produces wheat, sorghum, millet, and soybeans. In the west, nomadic herding is common. (See the unit land use and resources map.)

China also has rich fishing resources. The Chinese have a long tradition of both ocean and freshwater fishing. Raising and harvesting fish and marine life in ponds or other bodies of water, known as **aquaculture**, is also important. This practice helps protect against taking too many fish from rivers and seas. It also provides valuable exports such as shrimp.

Like aquaculture, China's silk industry depends on raising small animals under controlled conditions. Silkworms feed on mulberry leaves. Their

#### Electricity Consumption per Person



Source: Central Intelligence Agency, The World Factbook 2001

**INTERPRETING THE GRAPHS** When fully operational, the Three Gorges Dam will generate more electricity than any other dam now in existence. China's population is more than four times the size of the U.S. population. Electricity consumption per person differs significantly, however. **How does China's electricity consumption compare to that of the United States? What factors may account for the difference?**



#### INTERPRETING THE VISUAL RECORD

By the 200s B.C., Chinese farmers had developed an ox-drawn iron plow similar to the one used by the farmer shown. This innovation allowed them to increase production. **How might this new technology have contributed to the growth of Chinese society?**